

CLAIMS

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sub B2

1. Method for strip-coating a metallic strip-shaped substrate with a strip of plastic comprising the successive stages

- (i) in-situ casting of a plastic strip;
  - (ii) leading the plastic strip around a preferably internally water-cooled cooling roll;
  - (iii) leading away the plastic strip between an opened contact roll and the substrate until the plastic strip production is underway and stabilised;
  - (iv) bringing the plastic strip and the substrate up to speed and heating the substrate to a temperature of the substrate close to or above the softening temperature of the part of the plastic strip facing the substrate;
  - (v) pressing the plastic strip onto the substrate by closing the contact roll and where applicable breaking off the plastic strip and stopping it being led away, while the substrate and the cooling roll are connected by the plastic strip;
  - (vi) coating the substrate with the plastic strip at high speed;
- while performing on the plastic strip as it travels between cooling roll and contact roll at least one of monitoring its thickness, monitoring its colour, monitoring strip tension and trimming its width.

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2. Method in accordance with Claim 1, <sup>wherein</sup> ~~characterised in that~~ after the plastic strip has been applied an extra heat treatment stage follows in order to improve adhesion.

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3. Apparatus for strip-coating a metallic strip-shaped substrate with a strip of plastic

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in accordance with claim 1, comprising in combination:

- means of conveying the metal substrate;
- a contact roll for pressing the plastic strip onto the substrate;
- means of casting for casting the plastic;
- a cooling roll for the formation of a plastic strip;
- means of feeding and guiding for bringing the plastic strip to the substrate via the contact roll;

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wherein the contact roll is movable to a first position apart from the substrate wherein it is suitably arranged to co-operate with a means of conveying off the plastic strip and to a second position relative to the substrate wherein it is suitable to press the plastic strip onto the substrate.

4. Apparatus in accordance with Claim 3, <sup>wherein</sup> ~~characterised in that~~ the contact roll is rubber at least on a surface with which it comes into contact with the plastic strip.

5. Apparatus in accordance with <sup>claim 3, wherein</sup> ~~Claims 3 of 4, characterised in that~~ the means of conveying substrate, the contact roll, the means of casting, the cooling roll and the means of feeding and guiding are essentially duplicated, one set on each side of where the substrate is situated during operation for simultaneously two-sided coating the substrate.

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